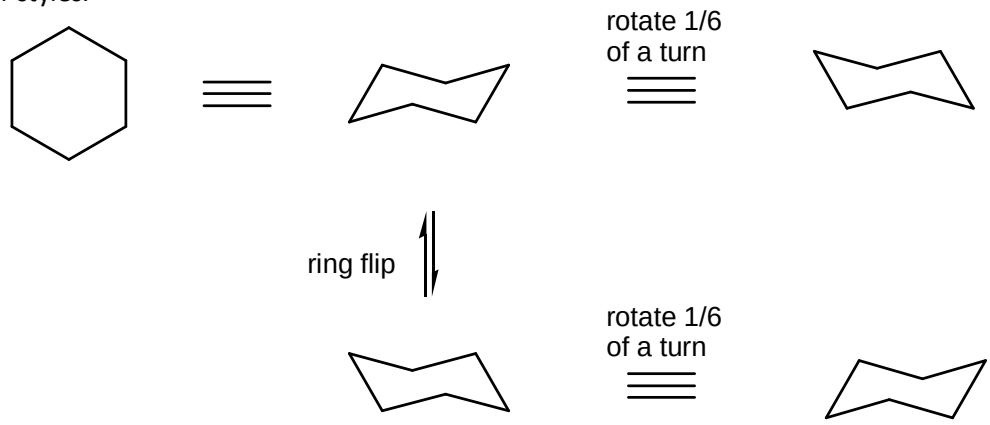
Organic Chemistry 1 – Spring 2010
Worksheet for Jacquie's recitation
Week of 3/8/10

1) Using the templates below, draw the flat, top-down view of (1R,3R,5S)-1-bromo-3-ethyl-5-iodo-1-methylcyclohexane. Convert this to one chair conformer, then the other. Show each ring-flip isomer in both chair styles.



2) Reacting (S)-4-chlorocyclohex-1-ene with Br_2 and CH_2Cl_2 gives two products. Are these products enantiomers or diastereomers? Based on the two chair conformations of each of these molecules, which product has the most stable conformation possible?

3) For the molecule (S)-1,1,2-trimethylcyclohexane, how many gauche interactions exist in each of its two ring-flip forms?